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December 16, 2003

Ms Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: CC Docket No. 01-338

Dear Ms Dortch:

This is to inform you that on December 15, 2003, BellSouth met with Lisa Zaina to discuss BellSouth's Petition for Reconsideration of the Commission's Triennial Review Order. Representing BellSouth at this meeting were Peter Hill, Jon Banks, Richard Mosley and the undersigned.

In this meeting, BellSouth responded to the objections of a number of CLECs to its request that the FCC extend broadband relief to Fiber-to-the-Curb. In particular, we addressed the false statements made by AT&T concerning the capability of FTTC to provide multi-channel video programming. Specifically, BellSouth is currently using FTTC architecture to offer multi-channel video to approximately 200,000 end-users in its region and has approximately 40,000 actual customers. The attached presentation was distributed at this meeting and formed the basis of the discussion.

Pursuant to the Commission's rules, please include a copy of this notice and attachment in the record of the proceeding identified above. Thank you.

Sincerely,



Glenn T. Reynolds

cc: Lisa Zaina

# Fiber Loops

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Peter Hill

December 15, 2003

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## **FCC Goal Should Be to Get Broadband Relief “Right”**

- **TRO sought to incent deployment of Next Generation Broadband by eliminating regulatory burdens on ILECs**
  - + “... we decline to attach unbundling requirements to the next-generation network capabilities of fiber based loops, e.g., those loops that make use of fiber optic cables and electronics or optical equipment, capable of supporting truly broadband transmission capabilities.....” TRO at para. 272
- **Most of the arguments raised by opponents to FTTC are arguments against Broadband Relief generally and draw no distinction between FTTH and FTTC.**
  - Incentives to Invest
  - CLEC Impairment
  - Reliance on Existing Feeder network
  - Availability of UNEs
  - Application to existing loops vs. future build
- **Commission should reject CLEC arguments effectively to reconsider the analysis underlying Broadband Relief**

## **FCC Goal Should Be to Get Broadband Relief “Right”**

- **FCC expressly intended to adopt proposal of equipment manufacturers for Broadband Relief in recognition of their important role in Telecom segment of US economy**
- **Nothing in the HighTech Broadband Coalition proposal distinguished between FTTH and FTTC because the industry considers them equivalents.**
- **Not surprising that TRO contains no analysis whatsoever as to why FTTC and FTTH should be treated differently.**
- ***BellSouth proposal unanimously supported by manufacturing industry: HTBC, Catena, Marconi, Alcatel, Corning***



## Broadband Impairment Analysis

- **No Distinction can be made between FTTC and FTTH in factors considered by Commission for granting Broadband Relief: (see TRO paras. 273-280)**
  - + Entry Barriers: “both incumbent and competitive carriers must negotiate rights-of-way, respond to bid requests for new housing developments, obtain fiber optic cabling and other materials, develop deployment plans, and implement construction programs.”
  - + CLECs already active in deploying FTTC demonstrating lack of impairment
  - + ILECs and CLECs on equal footing with respect to “sunk costs” and “first mover advantage”.
  - + Identical potential for substantially greater return on investment “by offering voice, data, video, and other services” that “ameliorate many of the entry barriers presented by the costs and scale economies.” In fact, lower per-unit costs of FTTC make it more even economically viable than FTTH.
  - + FTTC meets any definition of “advanced telecommunications capability” required to be encouraged by the Commission pursuant to Section 706.

## **BellSouth FTTC Video**

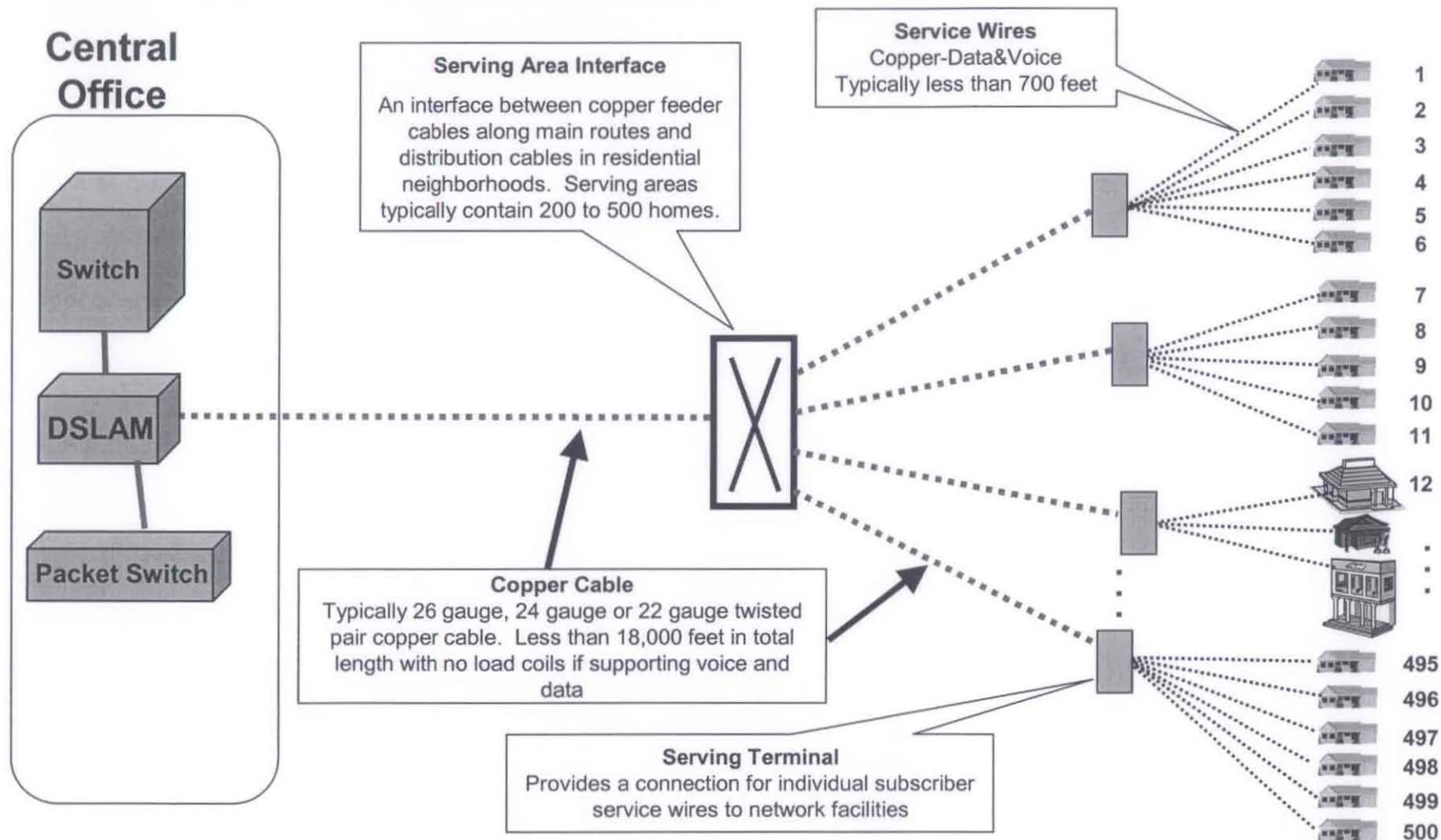
- **BellSouth Video Offer is full multi-channel cable TV competitive offering**
- **By the end of this year we will have approximately 1 Million Homes served by FTTC**
  - + Of these, more than 200K are currently capable of being served by BellSouth Entertainment Wireline Video
  - + BellSouth Entertainment has significant video penetration in these homes
- **We Continue to deploy Video in Selected New FTTC Deployments**
- **DirecTV deal includes Content for FTTC effort**
- **2004 Plans Under Consideration**
  - + FTTC Acceleration
  - + Video Retrofit

## Other CLEC Objections are Wrong

- **RBOC Request for Proposal on Fiber-to-the-Premises**
  - + FTTP includes Curb implementations and also shared electronic MDU implementations (architecturally equivalent)
  - + “Tools in our Tool Belt”
- **Potential “Gaming” from lack of Bright Line standard**
  - + 500 Feet from Premises proposal is a “Bright Line” supported by technical specifications, Telcordia and physics limitations for multi-channel video.



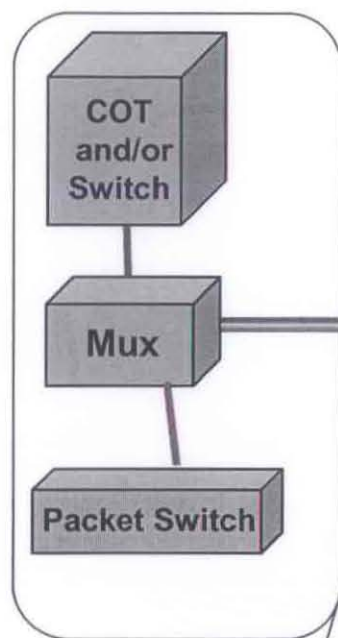
## All-Copper Loop Reference Architecture





# Fiber Fed Digital Loop Carrier "Hybrid Loop" Reference Architecture

## Central Office



Fiber optic feeder cable

**Remote Terminal**  
located in neighborhood within 12,000 feet of customers. Typically provides service to 400 to 1,000 homes.



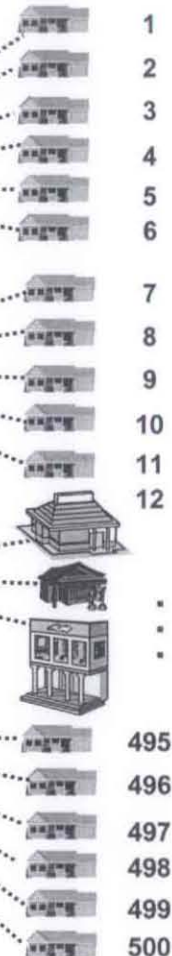
**Serving Area Interface**  
An interface between copper feeder cables along main routes and distribution cables in residential neighborhoods. Serving areas typically contain 200 to 500 homes.



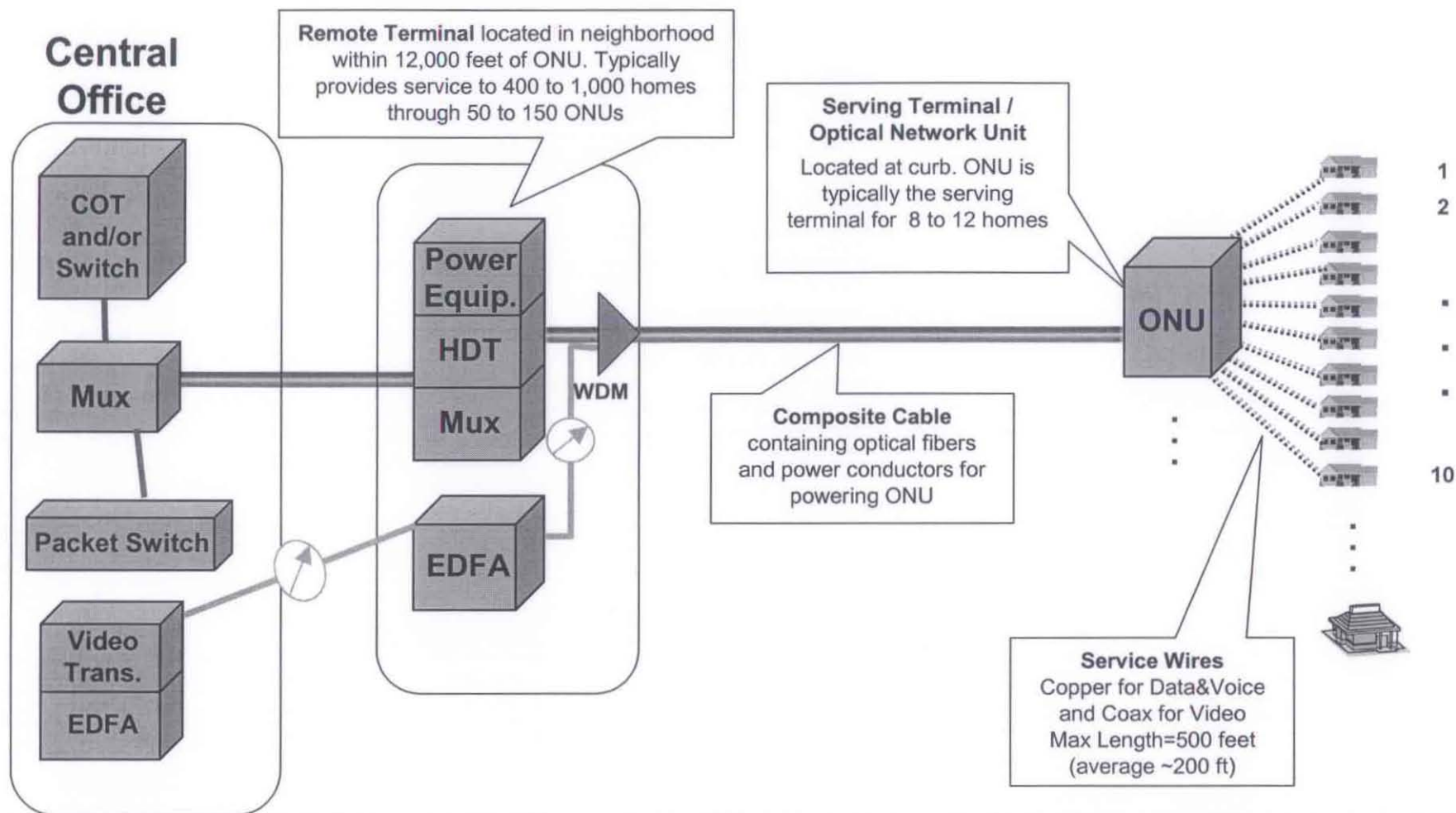
**Copper Cable**  
Typically 26 gauge or 24 gauge twisted pair copper cable, total length less than 12,000 feet

**Service Wires**  
Copper-Data&Voice  
Typically less than 700 feet

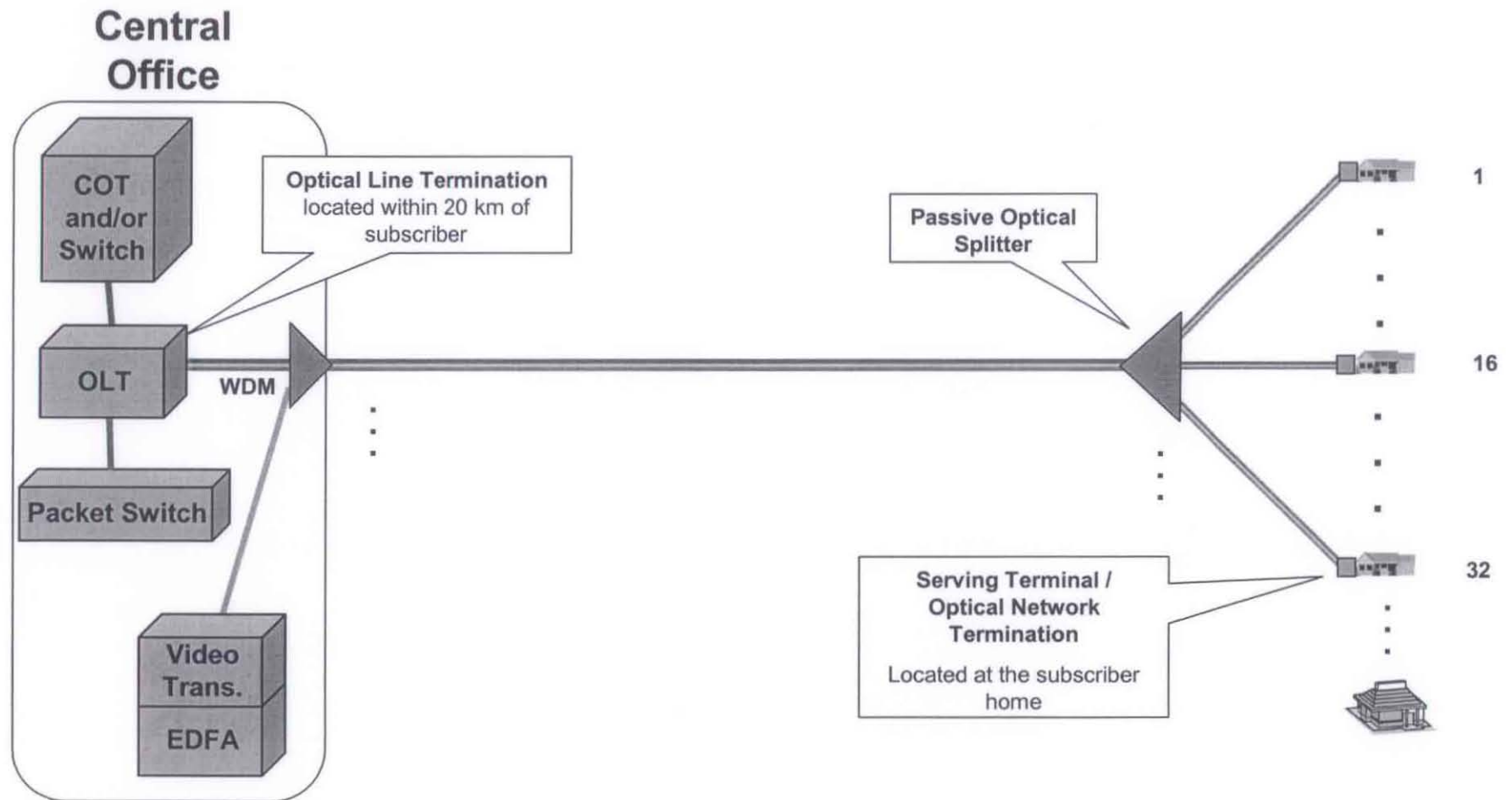
**Serving Terminal**  
Provides a connection for individual subscriber service wires to network facilities



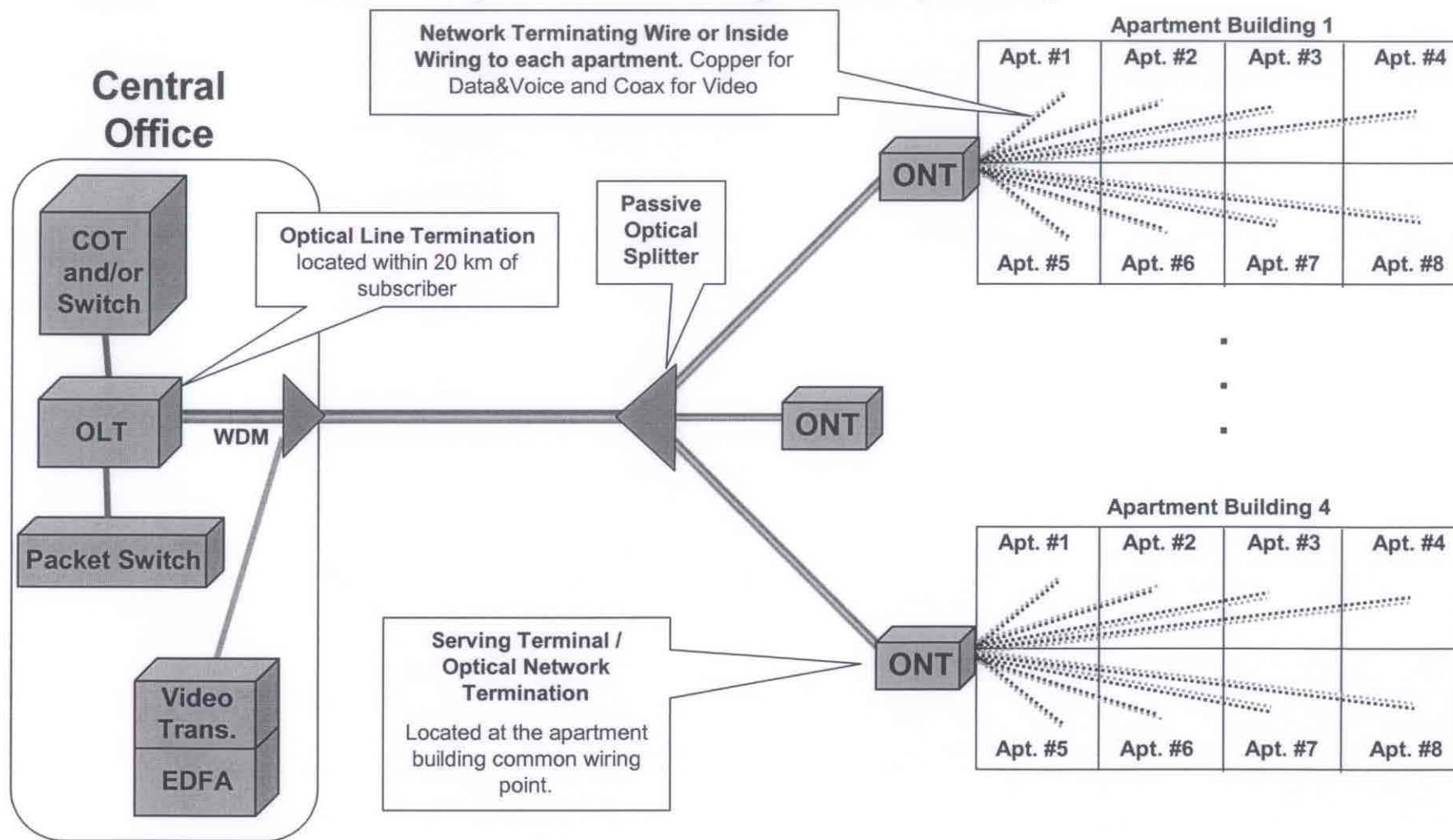
## Fiber to the Curb (FTTC) Reference Architecture



## Fiber to the Home (FTTH) Reference Architecture



## Fiber to the Multiple Dwelling Unit (MDU)





## Service Capabilities

	Voice	Data	Video
Fiber to the Curb	Yes	> 100Mbps	Yes
Fiber to the Home	Yes	> 100Mbps	Yes
Fiber to the Multiple Dwelling Unit (MDU)	Yes	> 100Mbps	Yes



Fiber Fed Digital Loop Carrier "Hybrid Loop"	Yes	~5Mbps for 12kft	No
All-Copper Loops	Yes	~256Kbps for 18kft	No

## **BellSouth FTTC Service Offerings**

- **Voice Services**

- **High Speed Internet Access**

  - +ADSL

  - +Ethernet

- **Multi-Channel Video**

  - +Channel Offerings (Depends on market)

    - 72 analog channels

    - 160 digital channels

  - +Customer Package Offerings

    - Three Basic Packages

    - Eight Premium Packages

    - Robust Pay-Per-View Package

## Proposed Definition to Improve Fiber Loops Portion of Order

- *The Commission should amend Section 51 of its rules to read as follows:*
  - + **Section 51.319(a)(3) [] ... A FTTH loop includes a fiber loop that provides a broadband transmission facility with capacity to deliver voice, multi-channel video, and data services to mass market customers consisting of a fiber optic cable connection and/or transmission path, whether lit or dark, between a distribution frame (or its equivalent) in the central office and the loop demarcation point and/or fiber serving terminal supporting a service drop length of not more than 500 feet. Loops provided over fiber that connects to a fiber serving terminal in an MDU shall also be treated as fiber loops. A fiber serving terminal<sup>1</sup> is the network equipment that provides a point to connect service wires for individual customers to the shared network facilities providing their service. [Source: Telcordia, GR-909-CORE Issue 1, March 2000, Section 2.20]**